This record appears to represent an extension of *nigriscapularis* from nearby southwest Uganda, and is the best evidence for its occurrence in Tanzania. Stevenson & Fanshawe (2003) show its range to include north-west Tanzania, and BirdLife International (2012) includes the Kigoma area of western Tanzania within the "probable range" but seemingly with little or no empirical evidence. The Tanzania Bird Atlas has no confirmed records for *C. nigriscapularis*, although a single report from Rumanyika Game Reserve by M. Baker is assumed to refer to this species. This appears to be the first confirmation of its occurrence in Tanzania.

## References

- BirdLife International. 2012. *Caprimulgus nigriscapularis*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. <www.iucnredlist.org>. Downloaded on 04 January 2014.
- Carswell, M., Pomeroy, D., Reynolds, J. & Tushabe, H. (2005). *The Bird Atlas of Uganda*. British Ornithologists' Club & British Ornithologists' Union, University of Oxford.
- Cleere, N. 1998. Nightjars: a guide to nightjars and related nightbirds. Robertsbridge, UK: Pica Press.
- Dickinson, E.C. (Ed). 2003. *The Howard and Moore Complete Checklist of the Birds of the World, 3rd ed.* London: Christopher Helm.
- Dickinson, E.C. & Remsen, J.V. Jr. (Eds). 2013. *The Howard and Moore Complete Checklist of the Birds of the World, 4th ed.,* Vol. I, Eastbourne, UK: Aves Press.
- Dowsett, R.J. & Dowsett-Lemaire, F. 1993. A contribution to the distribution and taxonomy of Afrotropical and Malagasy birds. Tauraco Research Report No. 5.
- Fry, C.H. & Harwin, R.M. 1988. Order Caprimulgiformes. In Fry, C.H., Keith, S. & Urban, E.K. (Eds). *The birds of Africa*. Vol. 3. London: Academic Press.
- Zimmerman, D.A., Turner, D.A. & Pearson, D.J. 1996. *Birds of Kenya and Northern Tanzania*. London: A&C Black.

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# The genus *Phoeniculus* in eastern and north-eastern Africa, with remarks concerning the *Phoeniculus purpureus* superspecies

The genus *Phoeniculus* Jarocki 1821 currently comprises five species, all confined to sub-Saharan Africa (Fry 1988). Two (*castaneiceps* and *bollei*) are forest specialists, while the remaining three (*purpureus, damarensis* and *somaliensis*) make up a superspecies of wooded savanna species, and form the basis of this note.

Traditionally wood-hoopoes and scimitarbills have comprised the Afrotropical family Phoeniculidae Bonaparte 1831. Peters (1945) recognized two genera (*Phoeniculus* and *Rhinopomastus*) while White (1965) placed all in *Phoeniculus*. The single genus arrangement (*Phoeniculus*) was also preferred by Davidson (1976) and Fry (1988), while Sibley & Ahlquist (1985) recommended separate family status for wood-hoopoes (*Phoeniculidae*) and scimitarbills (*Rhinopomastidae*).

Within the genus Phoeniculus, the P. purpureus superspecies, occurring in all

savanna regions of Africa, has been the subject of much debate. The forms *damarensis*, *granti* and *somaliensis* appear very closely related to *purpureus*, but all have been variably treated as either separate species or sub-species, and much needed DNA sequencing data remains scant. With several forms described, those occurring in eastern and north-eastern Africa are:

*Phoeniculus purpureus* (Green Wood-hoopoe) including *niloticus and marwitzi Phoeniculus damarensis/granti* (Violet Wood-hoopoe) *Phoeniculus somaliensis* (Black-billed Wood-hoopoe) including *abyssinicus and neglectus* 

In Green Wood-hoopoes the degree of divergence between Namibian birds and Kenyan *P. purpureus marwitzi* is low, and in all wood-hoopoes the degree of phenotypic divergence among currently recognized taxa is poorly characterized, while mantle plumage varies among individual wood-hoopoes and between age classes (Cooper *et al.* 2001). At the same time there appear to be no discernible vocal differences between the three forms of the *P. purpureus* superspecies.

In Kenya *P. purpureus marwitzi* is largely blackish, glossed with green on the head, upperparts and breast, while *P.p. niloticus* has the head, mantle, breast and tail appearing more steel-blue than green, thus appearing very similar to the Violet Wood-hoopoe of eastern Kenya. The continuum between green and purple is well known to all who study iridescent plumage, with the colours shifting from one to the other as the light source and angle vary, and so plumage colours in *purpureus* may appear to change from greenish to blue to violet to almost blue-black depending on whether the bird is seen in bright sunlight, deep shade or dappled light, often leading to identification difficulties in several areas. There can also be apparent differences in colour between early morning and late afternoon viewing conditions. While recently examining specimens in the BMNH collection at Tring, I was impressed at how much the varying colours would change depending on whether viewed in sunlight or under artificial light conditions.

The Black-billed Wood-hoopoe *P. somaliensis*, long considered a race of the Green Wood-hoopoe, was deemed worthy of separate species status by Davidson (1976) on the grounds that the largely all-black bill is typically more slender and decurved than in either *purpureus* or *damarensis*, and indeed that the longer bill does serve to distinguish it from the other two.

While some authors consider the Violet Wood-hoopoe *P. damarensis* a Southern African endemic, others believe that it might simply be a plumage variant and junior synonym of *P. purpureus* (Cooper *et al. op. cit.*). The form *granti* (treated as a full species by White 1965) is endemic to the palm-fringed river systems of eastern Kenya, with as yet no known cases of intergrades with *purpureus*. Elsewhere however, birds reported as *granti* may be nothing more than individual *purpureus* with distinctive violet tail and mantle feathering appearing more prominent depending on light conditions at the time. Adult *granti* have varying densities of green-glossed feathers and juveniles cannot safely be distinguished from juvenile *purpureus*. On the other hand any observed differences in plumage colour between Green and Violet Woodhoopoes may well be clinal or habitat-related, with possibly a more pronounced violet colouration occurring in birds in arid areas.

Ash & Atkins (2009) omitted the Violet Wood Hoopoe from south-west Ethiopia on the grounds that Neumann did not after all collect it there. Peters (1945) did however include the Omo Valley and lakes Rudolf and Stephanie within the range of *P. purpureus granti*. Two early specimens collected by Zaphiro at 4150 ft (1263 m) along the Zoula River (a tributary of the Omo) in July 1905 (Ogilvie-Grant 1913) were originally named *somaliensis*, but recent close examination at Tring showed both birds to be short-billed, and so to belong to *purpureus* or *granti*. Meanwhile, in Somalia, there are no "typical" *granti*-type birds along the Juba or Shabeelle river valleys in the south where one might expect them (Ash & Miskell 1998 reported only *somaliensis* there). That then leaves *granti* as a largely Kenya endemic, but there also remains the question as to whether *granti* is a race of *damarensis* or *purpureus*. On simply zoogeographical grounds it would make more sense to treat *granti* and *damarensis* as belonging to separate species, but bearing in mind the reservations expressed by Cooper *et al.*, our eastern and northeastern birds are all the more in need of further study.

While Cooper *et al.* may not have presented a clear case for treating *damarensis* as simply a plumage variant of *purpureus*, they have identified issues that need to be addressed more fully. Further study of vocalizations together with additional molecular work that includes representatives of *niloticus*, *neglectus*, *abyssinicus*, *somaliensis*, *marwitzi* and *granti* would seem necessary to clarify relationships and species limits within this complex group of wood-hoopoes.

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## References

- Ash, J. & Atkins, J. 2009. Birds of Ethiopia and Eritrea. An Atlas of Distribution. London: Christopher Helm.
- Ash, J.S. & Miskell, J.E. 1998. Birds of Somalia. Robertsbridge, UK: Pica Press.
- Cooper, M.I., Cunningham, M. & Cherry, M.I. 2001. Taxonomic status of the Namibian Violet Woodhoopoe *Phoeniculus damarensis* as determined by mitochrondial DNA. *Ibis* 143: 572– 579
- Davidson, N.C. 1976. The evolution and systematics of the *Phoeniculidae*. Bulletin of the Nigerian Ornithological Society. 12: 2–17.
- Fry, C.H. 1988. Family Phoeniculidae in Birds of Africa. Vol 3. London: Academic Press.
- Ogilvie-Grant W.R. 1913. On a collection of birds from southern Abyssinia, presented to the British Museum by Mr. W.N. McMillan. *Ibis* 1: 550–641.
- Peters, J.L. 1945. *Check-list of birds of the world*. Vol. 5. Cambridge, USA: Museum of Comparative Zoology.
- Sibley, C.G. & Ahlquist, J.E. 1985. The relationships of some groups of African birds, based on comparisons of the genetic material, DNA. Pp. 115-161 in *Proceedings of the International Symposium on African Vertebrates*. Bonn, West Germany: Museum A. Koenig.
- White, C.M.N. 1965. A revised check list of African Non-Passerine Birds. Lusaka: Government Printer.

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